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**Robots vs. Pizza Production**

You own a company that produces both pizzas and robots below are the numbers you are able to produce with the resources you currently have.

|  |  |  |
| --- | --- | --- |
| Time spent per production | Number of Pizzas | Number of Spaghetti dinners |
| All on pizzas | 20 | 0 |
| ¾ on pizzas  ¼ on Robots | 19 | 1 |
| ½ on Pizzas  ½ on Robots | 16 | 2 |
| ¼ on pizzas  ¾ on Robots | 10 | 3 |
| All on Robots | 0 | 4 |

Use the data from table above to create a production possibilities curve.

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1. Draw a new line that would demonstrate what would happen if a new program was purchased which made programming robots easier.
2. Draw a third line that would demonstrate what would happen if there were a drought and 85% of the wheat crops failed.
3. Describe what would happen if demand for pizza decreases.
4. If you wanted to make 16 pizzas, how many robots will you also be able to make?
5. If you decide to reduce your pizza production to 10 pizzas from 19 pizzas, how many more spaghetti dinners will he be able to produce than before?
6. Identify examples of each factor of production that must have been used to produce one pizza.
   1. Land: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Labor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Capital: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What would your opportunity cost be if you decided to increase your production of Robots from 1 to 3?
8. Explain how does this situation demonstrate the central economic problem of scarcity?